



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/509,740  | 07/26/2005  | Shin-ichi Kadowaki   | 2004_1498A          | 9921             |
| 513 7590 03/16/2009<br>WENDEROTH, LIND & PONACK, L.L.P.<br>1030 15th Street, N.W.,<br>Suite 400 East<br>Washington, DC 20005-1503 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| AGUSTIN, PETER VINCENT  |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 2627  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
| 03/16/2009  |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/509,740

**Applicant(s)**

KADOWAKI ET AL.

**Examiner**

Peter Vincent Agustín

**Art Unit**

2627

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 46, 151 and 152 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 46, 151 and 152 is/are rejected.
- 7) ☒ Claim(s) 151 and 152 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This application is a national stage entry (371) of PCT/JP03/04209 filed on April 2, 2003.
2. Claims 46, 151 & 152 are currently pending.

#### ***Claim Objections***

3. Claims 151 & 152 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Note that independent claim 46 is directed to a measuring method, while claims 151 & 152 only refer to the "optical storage medium according to claim 46". The dependent claims do not include every limitation of the independent claim, rendering the dependent claims improper. See also MPEP § 608.01(n), "Infringement Test" for dependent claims ("a proper dependent claim shall not conceivably be infringed by anything which would not also infringe the basic claim"). Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 46, 151 & 152 are rejected under 35 U.S.C. 102(b) as being anticipated by Furumiya et al. (WO00/28535, published on May 18, 2000) (please refer to US 6,791,926).

In regard to claim 46, Furumiya et al. disclose a measuring method for measuring a jitter of edges of marks and spaces recorded on an optical storage medium (see Figures 11A-11I) comprising multiple tracks for recording information using marks and spaces, wherein each mark has a mark length limited by a run length limited (RLL) modulation (column 7, lines 9-21: "mark lengths from 3T to 14T"), the measuring method comprising: emitting a light beam onto the optical storage medium (see Figure 1, elements 1, 3 & 4); receiving a reflected light beam from the marks and spaces (inherent photodetector in optical head 3); and measuring the jitter of the edges not including edges adjacent to one of a shortest mark and a shortest space (as shown in Figures 11A-11I, jitter is not measured from edges of a 3T mark or a 3T space).

In regard to claim 151, Furumiya et al. disclose a reproducing method for reproducing the optical storage medium according to claim 46, the reproducing method comprising: emitting a light beam onto the optical storage medium (see Figure 1, elements 1, 3 & 4); and reproducing the marks and spaces (see Figures 11A-11I).

In regard to claim 152, Furumiya et al. disclose a recording method for recording the information onto the optical storage medium according to claim 46, the recording method comprising: forming marks and the spaces by emitting a light beam onto the optical storage medium (see Figures 11A-11I); and recording the information using the marks and the spaces (see Figures 11A-11I).

6. Claims 46, 151 & 152 are rejected under 35 U.S.C. 102(c) as being anticipated by Takeda (US 2003/0053386).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

In regard to claim 46, Takeda discloses a measuring method for measuring a jitter (see “jitter detecting section” in Figure 2) of edges of marks and spaces recorded on an optical storage medium comprising multiple tracks for recording information using marks and spaces, wherein each mark has a mark length limited by a run length limited (RLL) modulation (see Figures 12A-12E), the measuring method comprising: emitting a light beam onto the optical storage medium (see Figure 1, element 14); receiving a reflected light beam from the marks and spaces (inherent photodetector in optical pickup 14); and measuring the jitter of the edges not including edges adjacent to one of a shortest mark and a shortest space (paragraph 0007: “even when the 3T signal is missing, for example, the jitter value is measured at the rising edge or the falling edge of the remaining signals of 4T to 11T or 4T to 14T”).

In regard to claim 151, Takeda discloses a reproducing method for reproducing the optical storage medium according to claim 46, the reproducing method comprising: emitting a light beam onto the optical storage medium (see Figure 1, element 14); and reproducing the marks and spaces (Figure 1: “data to be replayed”).

In regard to claim 152, Takeda discloses a recording method for recording the information onto the optical storage medium according to claim 46, the recording method comprising: forming marks and the spaces by emitting a light beam onto the optical storage medium (see Figure 1, element 14); and recording the information using the marks and the spaces (Figure 1: “data to be written”).

***Response to Arguments***

7. Applicant's arguments regarding the rejections based on the admitted prior art have been fully considered, but are now moot, since the rejections have been withdrawn. However, in light of the amendments, the claims are now rejected under 35 U.S.C. § 102(b) based on Furumiya et al. (WO00/28535) and under 35 U.S.C. § 102(e) based on Takeda (US 2003/0053386).

Regarding the Takeda reference, the Applicant is requested to provide certified translations of the foreign priority documents in order to perfect the claim for foreign priority and to disqualify the Takeda reference as prior art.

8. In response to Applicant's comment regarding the allowability of claim 46, as currently amended, it should be noted that claim 46 is broad enough to be anticipated by the new references, as noted in the new rejections above. During the interview dated February 12, 2009, the Examiner acknowledged that the novelty of the invention lies within the feature of obtaining a "first-playback-signal-quality through jitter measurement which is performed, during a playback of the predetermined signal, by detecting the edge of a mark or a space NOT INCLUDING EDGES ADJACENT TO ONE OF AN m\*T-length mark and an m\*T-length space." Note that this feature not only includes the currently claimed limitation of "measuring the jitter of the edges not including edges adjacent to one of a shortest mark and a shortest space", but also ties the measured jitter with an additional feature of measuring a signal quality. See for example, child application 11/980,662, which recites "...measuring jitter in signals based on the reflected light, *but not measuring jitter in signals obtained from edges of the shortest marks or spaces*; and determining from the measured jitter whether the optical storage medium is good or defective". See also child application 11/980,481, which recites "...an evaluation unit

for determining from *the measured jitter* if the optical storage medium is good or defective; wherein the jitter measuring unit measures jitter from an optical storage medium to which digital information is recorded as a train of marks or spaces of length  $kT$  based on a period  $T$  and an integer  $k$  of two or more, *but does not measure jitter in signals obtained from edges of marks or spaces of length  $2T$ .*” Both children applications are currently pending and have been indicated by the examiner as having allowable subject matter.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is (571) 272-7567. The examiner can normally be reached on Monday-Thursday 8:30 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter Vincent Agustin/  
Primary Examiner, Art Unit 2627